Amid the volumes of information available on humanitarian crises, there are only few statistics worth remembering and using. Look out for the following potential sources of errors, scrutinize the data and spot the difference between solid stats and dubious data (Adapted from Joel Best).

### 1. WHO HAS BEEN COUNTING AND WHY?

- **Example:** 7.4 million people are in need in Afghanistan in 2014. 7.4 million people are considered in need in Afghanistan, as shown in the following slide chart.

  - Why is it dubious: Double-counting the number of people in need is a common issue. The example illustrates the underlying thinking error. The number of people in need per sector has been combined to total 7.4 million. However, the units of analysis are not mutually exclusive categories; some people who are severely, food insecure, will have been affected by natural disasters too, etc.

- **Keep in mind:**
  - Why was the data collected? What is the agenda of the source? Could it be biased?
  - What is the expertise of those who have collected, reproduced and disseminated the data?
  - Are they sufficiently knowledgeable to research the matter?
  - Is there a strong track record of producing accurate information?

### 2. WHAT HAS BEEN COUNTED?

- **Example:** In 2015, Colombia has the second highest number of IDPs in the world (6 million) after Syria (6.5 million). Why is it dubious: The concept of an IDP in Colombia is very broadly defined; displacement figures for Colombia commonly count all people who were internally displaced since the 1960s.

  - Why is it dubious: Numbers presented without sufficient information about measurement choices or experimental design.

- **Keep in mind:**
  - Key for concepts that are widely used within the humanitarian community, but lack a strong track record of producing accurate information such as informal, internally displaced, households, urban...
  - Consider whether the concept used could have been defined too narrowly or too broadly.
  - Have definitions remained the same at the different points in time? Has there been domain expansion (Definitions that have been broadened over time)?

### 3. HOW WAS IT PROCESSED AND ANALYSED?

- **Example:** UNHCR says most of the Syrians arriving in Greece are students. Why is it dubious: The results of the survey indicate that ‘student’ was the most frequently mentioned occupation, indicated by 16% of respondents.

  - Why is it dubious: Do the data consist of numbers that seem hard to produce — how could anyone calculate that? Close scrutiny is needed on sensitive topics such as SoSs or informal activities.

- **Keep in mind:**
  - Numbers presented without sufficient information about measurement choices or experimental design.
  - Are the definitions (e.g. extended families instead of households) that might affect the resulting statistic?
  - Calculations of measurement choices or others.
  - Particular caution is required when reviewing forecasts or estimates about future trends

### 4. HOW WAS IT PACKAGED?

- **Example:** Of the more than 80 million people estimated to have been in need of humanitarian assistance in 2014 over 75% were women and children. Why is it dubious: 75% of all people in high priority countries are women and children – it is unclear how this was calculated and it is most likely only included for shock programming.

  - Why is it dubious: Do the data consist of numbers that seem hard to produce — how could anyone calculate that? Close scrutiny is needed on sensitive topics such as SoSs or informal activities.

- **Keep in mind:**
  - Double-counting calculations for focus.
  - Are there misleading comparisons, timeframes, comparison groups or standards used?
  - Have any cause and effect relationships been misused?
  - Are the percentages in line with what I know and expect or surprisingly different? Have decimal points been misplaced?

### 5. HOW HAS IT BEEN MEASURED?

- **Example:** Before the outbreak of violence in Burundi following mass-protests, under 5 acute malnutrition rates were already 4%. Why is it dubious: Global Acute Malnutrition rates of above 15% are considered critical, the most severe level of the 5:1 scale. One of the highest levels of GAM recently recorded was in South Sudan, at 22% (Operation Nutrition 2014).

  - Why is it dubious: Dramatic statements that take the form of statistical claims, such as hypotheses, ‘the best’, ‘the worst’, ‘new evidence’.

- **Keep in mind:**
  - Unhelpful terminology, (e.g. used) used for shock purposes.
  - Unhelpful data misleading or not misused.
  - Unhelpful definitions, (e.g. used) used for shock purposes.
  - Blurred numbers that seem suspiciously large or small.
  - Are the figures in line with what I know and expect or surprisingly different? Have decimal points been misplaced?